

R-state-var-init-rule^{0,22}

$\forall i:\text{Id}, ds:x:\text{Id} \text{ fp} \rightarrow \text{Type}, da:k:\text{Knd} \text{ fp} \rightarrow \text{Type}, x:\text{Id}, T:\text{Type}, v:T, ks:\text{Knd List},$
 $tr:(k:\{k:\text{Knd} \mid (k \in ks)\} \rightarrow \text{State}(ds) \rightarrow \text{Valtype}(da;k) \rightarrow T \rightarrow T).$
 $ds \parallel x : T$
 $\Rightarrow \text{Normal}(T)$
 $\Rightarrow (\forall k:\text{Knd}. (k \in ks) \Rightarrow \text{isrcv}(k) \Rightarrow i = \text{destination}(\text{lnk}(k)))$
 $\Rightarrow \text{Normal}(ds)$
 $\Rightarrow \text{Normal}(da)$
 $\Rightarrow \text{R-state-var-init}(i; ds; da; x; T; v; ks; tr)$
 $\vdash es.\text{es-decls}(es; i; ds; da)$
 $\Rightarrow \text{vartype}(i; x) \subseteq \rho T$
 $\& \forall e@i.$
 $(x \text{ after } e) = \text{es-trans-state-from}\{i:1\}(es; ks; tr; v; \text{es-init}(es; e); e) \in T$
 $\& (\text{first}(e) \Rightarrow (x \text{ when } e) = v \in T)$